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PATENT
ATTORNEY DOCKET NO. 10498-00067

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Nagi G. Ayad and Marc W. Kirschner

Serial No.: 10/817,204

Filed: April 2, 2004

Title: CELL CYCLE GENES REQUIRED FOR
MITOTIC ENTRY

)
)
) Examiner:
) Jae W. Lee, Ph.D.
)
) Art Unit: 1656
)
) Conf. No.: 3911
)
)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

In regard to the above identified application, we are transmitting herewith the attached:

1. Information Disclosure Statement,
2. Form PTO-1449 (3 sheets),
3. Copies of 34 references, and
4. Return postcard.

With respect to additional fees, the Commissioner is hereby authorized to charge the required fee of \$180.00, and any additional fees or credit overpayment, to Deposit Account No. 19-0733.

Respectfully submitted,

Dated: June 5, 2007

By

Handwritten signature of John P. Iwanicki

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INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.97-1.99, Applicants hereby submit the enclosed PTO Form 1449. Copies of the references are enclosed. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. § 1.56.

This statement is being filed after a first Office Action on the merits, but before receipt of a final Office Action or a Notice of Allowance. Please charge Deposit Account No. 19-0733 for \$180.00 in payment of the fee of §1.17(p).

In the judgment of the undersigned, portions of the listed references may be material to the Examiner's consideration of the presently pending claims. However, the references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This

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statement is not a representation that the listed references have effective dates early enough to be
“prior art” within the meaning of 35 U.S.C. § 102 or § 103.

Please apply any charges or credits to Deposit Account No. 19-0733.

Respectfully submitted,

Date: June 5, 2007


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INFORMATION DISCLOSURE CITATION

Page 1 of 3

Applicants: Nagi G. Ayad and Marc W. Kirschner

Filing Date: April 2, 2004

Group: 1645

U.S. PATENT DOCUMENTS

Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
	AA						
	AB						

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation	
							YES	NO
	AC							
	AD							

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

	AE	Cenciarelli et al., "Identification of a family of human F-box proteins," <i>Curr. Biol.</i> , 9:1177-1179 and S1-S3 (1999)
	AF	Cohen-Fix et al., "Anaphase initiation in <i>Saccharomyces cerevisiae</i> is controlled by the APC-dependent degradation of the anaphase inhibitor Pds1p," <i>Genes Dev.</i> , 10:3081-3093 (1996)
	AG	Fang et al., "Direct Binding of CDC20 Protein Family Members Activates the Anaphase-Promoting Complex in Mitosis and G1," <i>Mol. Cell</i> , 2:163-171 (1998)
	AH	Funabiki et al., "The <i>Xenopus</i> Chromokinesin Xkid Is Essential for Metaphase Chromosome Alignment and Must Be Degraded to Allow Anaphase Chromosome Movement," <i>Cell</i> , 102:411-424 (2000)
	AI	Gautier et al., "cdc25 Is a Specific Tyrosine Phosphatase that Directly Activates p34 ^{cdc2} ," <i>Cell</i> , 67:197-211 (1991)
	AJ	Heald et al., "Human Wee1 Maintains Mitotic Timing by Protecting the Nucleus from Cytoplasmically Activated Cdc2 Kinase," (1993) <i>Cell</i> 74:463
	AK	Kawasaki et al., "c-Fos/activator protein-1 transactivates <i>wee1</i> kinase at G1/S to inhibit premature mitosis in antigen-specific Th1 cells," <i>EMBO J.</i> , 20(18):4618-4627 (2001)
	AL	King et al., "A 20S Complex Containing CDC27 and CDC16 Catalyzes the Mitosis-Specific Conjugation of Ubiquitin to Cyclin B," <i>Cell</i> 81:279-288 (1995)
	AM	King et al., "How Proteolysis Drives the Cell Cycle," <i>Science</i> , 274:1652-1659 (1996)
	AN	Kipreos et al., "The F-box protein family," <i>Gen. Biol.</i> , 1:3002.1-3002.7 (2000)
	AO	Kotani et al., "Regulation of APC Activity by Phosphorylation and Regulatory Factors," <i>J. Cell Biol.</i> , 146:791-800 (1999) [Retracted 2005]
	AP	Kramer et al., "Mitotic Regulation of the APC Activator Proteins CDC20 and CDH1," <i>Mol. Biol. Cell</i> , 11:1555-1569 (2000)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. **Copies of references not provided at the time of this submission.

USPTO Form 1449		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No. 10498-00067	Serial No. 10/817,204		
INFORMATION DISCLOSURE CITATION Sheet 2 of 3				Applicants: Nagi G. Ayad and Marc W. Kirschner			
				Filing Date: April 2, 2004	Group: 1645		
U.S. PATENT DOCUMENTS							
Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
	BA						
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation YES NO
	BB						
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)							
	BC	Lee and Goldberg "Proteasome inhibitors: valuable new tools for cell biologists," <i>Trends Cell Biol.</i> 8:397-403 (1998)					
	BD	Lorca et al., "Fizzy is required for activation of the APC/cyclosome in <i>Xenopus</i> egg extracts," <i>EMBO J.</i> 17:3565-3575 (1998)					
	BE	Lustig et al., "Small Pool Expression Screening: . . .," <i>Methods Enzymol.</i> 283:83-99 (1997)					
	BF	McGarry et al., "Geminin, an Inhibitor of DNA Replication Is Degraded during Mitosis," <i>Cell</i> , 93:1043-1053 (1998)					
	BG	Michael and Newport, "Coupling of Mitosis to the Completion of S Phase through Cdc34-Mediated Degradation of Wee1," <i>Science</i> , 282:1886-1889 (1998)					
	BH	Murakami et al., "Mos positively regulates Xe-Wee1 to lengthen the first mitotic cell cycle of <i>Xenopus</i> ," (1999) <i>Genes Dev.</i> 13:620-631 (1999)					
	BI	Murray, "Cell Cycle Extracts," <i>Methods Cell Biol.</i> , 36:581-605 (1991)					
	BJ	Peters, "SCF and APC: the Yin and Yang of cell cycle regulated proteolysis," <i>Curr. Opin. Cell Biol.</i> , 10:759-768 (1998)					
	BK	Peters "Subunits and Substrates of the Anaphase-Promoting Complex," <i>Exp. Cell Res.</i> 248:339-349 (1999)					
	BL	Pfleger and Kirschner, "The KEN box: . . .," <i>Genes Dev.</i> 14:655- 665 (2000)					
	BM	Pfleger et al., "Substrate recognition by the Cdc20 and Cdh1 components of the anaphase-promoting complex," <i>Genes Dev.</i> 15:2396-2407 (2001)					
	BN	Russell and Nurse "Negative Regulation of Mitosis by <i>wee1+</i> , a Gene Encoding a Protein Kinase Homolog," <i>Cell</i> , 49:559-567 (1987)					
	BO	Salic et al., "Control of β -Catenin Stability: . . .," <i>Mol. Cell</i> , 5:523-532 (2000)					
	BP	Schlosser et al., "Analysis of Protein Phosphorylation by a Combination of Elastase Digestion . . .," <i>Anal. Chem.</i> , 73:170-176 (2001)					
EXAMINER					DATE CONSIDERED		
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				Filing Date: April 2, 2004			Group: 1645
U.S. PATENT DOCUMENTS							
Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
	CA						
	CB						
	CC						
	CD						
	CE						
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation
							YES NO
	CF						
	CG						
	CH						
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)							
	CI	Shevchenko et al., "Mass Spectrometric Sequencing of Proteins from Silver-Stained Polyacrylamide Gels," <i>Anal. Chem.</i> , 68:850-858 (1996)					
	CJ	Solomon et al., "Control of p34 ^{cdc2} Activation," <i>Cold Spring Harbor Symp. Quant. Biol.</i> 56:427-435 (1991)					
	CK	Stemmann et al., "Dual Inhibition of Sister Chromatid Separation at Metaphase," <i>Cell</i> , 107:715728 (2001)					
	CL	Visintin et al., "CDC20 and CDH1: A Family of Substrate-Specific Activators of APC-Dependent Proteolysis," <i>Science</i> , 278:460-463 (1997)					
	CM	Watanabe et al., "Regulation of the human WEE1Hu CDK tyrosine 15-kinase during the cell cycle," <i>EMBO J.</i> 14(9):1878-1891 (1995)					
	CN	Yamano et al., "The role of the destruction box and its neighboring lysine residues in cyclin B for anaphase ubiquitin-dependent proteolysis in fission yeast: defining the D-box receptor," <i>EMBO J.</i> 17:5670-5678 (1998)					
	CO	Zhou et al., "Ubiquitination and Degradation of the Substrate Recognition Subunits of SCF Ubiquitin-Protein Ligases," <i>Mol. Cell</i> 2:571-580 (1998)					
	CP	Zou et al., "Identification of a Vertebrate Sister-Chromatid Separation Inhibitor Involved in Transformation and Tumorigenesis," <i>Science</i> , 285:418-422 (1999)					
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